

Wisconsin Kirtland's Warbler 2014 Season Report

The Kirtland's warbler monitoring season is an astoundingly short duration, lasting a mere three months. Males typically arrive in Wisconsin the second week in May or earlier, while females are estimated to arrive a week after the males. This year at the Adams County breeding site, our first male was confirmed by Joel Trick (retired Fish and Wildlife Service biologist) on May 11.

Biologist and 2013 Kirtland's nest monitor, Daryl Christansen, confirmed the first female at the site on May 19. The end of May to early June marked nesting, as females diligently constructed nests and laid eggs. While the females incubated



Kirtland's nests are on the ground and well-concealed (circled in red). *Photo courtesy of Ashley Hannah*

eggs, the males defended the territory and foraged for invertebrates. The first nest was confirmed by nest monitor Jonathan Stein on June 4 with five eggs! The end of June and beginning of July brought a burst of activity as eggs hatched and adults focused their attention to rearing young. This time of year is also the start of fledgling activity for those nestlings fortunate to survive to day 8-10, an age where nestlings are old enough and strong enough to leave the nest. The first fledglings were confirmed on June 24 by our nest monitors.

The 2014 Kirtland's Adams County nest monitoring season concluded with excitement. Since our last update (see July 3 report), there was one remaining active nest that had four nestlings. On July 5, when the nestlings were old enough (5-7 days), the banding crew (Joel Trick, Ron Refsnider, Sarah Warner, Ashley Hannah) successfully color-banded all four nestlings and safely returned them to their nest. Jonathan and Ashley continued to monitor the nest and on July 8 the nestlings fledged. The fledglings were



A female color-banded Kirtland's warbler with an insect. This female is likely provisioning food to nestlings.

Photo courtesy of Ashley Hannah

resighted on July 11 and identified by their unique color-band combination. We eagerly await the 2015 Kirtland's warbler monitoring season to see if the nestlings color-banded in 2014 return to Wisconsin.

The 2014 monitoring season marked the initiation of two new projects (1) the playback experiment and (2) banding nestlings. Both projects will be continued next year. In the following report we summarize the major highlights of the 2014 Kirtland's monitoring season.

Kirtland’s Warbler Adams County Nest Monitoring Summary

Summary Highlights

- 11 males and 7 females were present at the site
- 7 of 11 males and 2 of 7 females were previously banded in past seasons
- 7 males paired with 7 females
- 8 nesting attempts were made by 7 pairs (one pair renested)
- 3 nests successfully fledged a combined total of 8-10 young



Above: A nestling Kirtland’s warbler between 5-7 days old. This nestling was color-banded, thus giving it a unique identification code. Field monitors will track the location and movement of this Kirtland’s by resighting it in the field and identifying it by its color-band code.

Photo courtesy of Joel Trick

Left: Kirtland’s warbler nestlings estimated to be 2-3 days old. *Photo courtesy of Ashley Hannah*

In comparing the 2014 nesting season to past nesting seasons (Table 1), 2014 had the lowest number of males reported since 2009 with 64% observed at the site in previous years. 2014 had a lower number of pairs and nests compared to previous years, yet greater than the numbers reported in 2008. 2014 had a lower number of successful nests compared to most previous years, but the greatest percentage of successful nests since 2009. Estimated fledgling success was low compared to the estimated success in 2009-11 and 2013, yet comparable to 2008 and 2012.

Table 1. 2008-2014 comparison of Kirtland’s Warbler nest data at the Adams County, WI. Includes totals for males present, returning males (males confirmed at the site in past seasons), number of pairs, number of nests, successful nests (determined if nestlings fledge the nest), and an estimated number of fledglings.

Kirtland’s Warbler Data for Adams County, WI, 2008-2014						
Year	Number of Males	Returning Males	Number of Pairs	Number of Nests	Successful Nests	Estimated Fledged
2008	7	-	5	5	2 (40%)	10
2009	10	5 (50%)	10	10	6-7 (60-70%)	23-27
2010	20	10 (50%)	11	16	3-5 (19-31%)	12-18
2011	20	16 (80%)	11	11	4 (36%)	9-17
2012	20	14 (70%)	10	14	4 (29%)	8-13
2013	16	13 (81%)	9	12	4 (33%)	13
2014	11	7 (64%)	7	8	3 (38%)	8-10

Kirtland's Warbler Census Summary

Census Highlights

- Census period: June 6-20
- 11 volunteers surveyed 41 sites in 6 counties
 - 13 sites in Douglas County, 8 sites in Bayfield County, 7 sites in Marinette County, 6 sites in Adams County, 4 sites in Jackson County, and 3 sites in Vilas County
- 13 singing males were detected during the census period (Figure 1)
 - 2 singing males recorded in northern counties: 1 in Bayfield County, 1 in Marinette County
 - 11 singing males recorded at the Adams County breeding site

Table 2. Singing males recorded during Wisconsin census 2008-2014. In 2007, 8 males were documented at the Adams site, but a statewide census was not conducted that year.

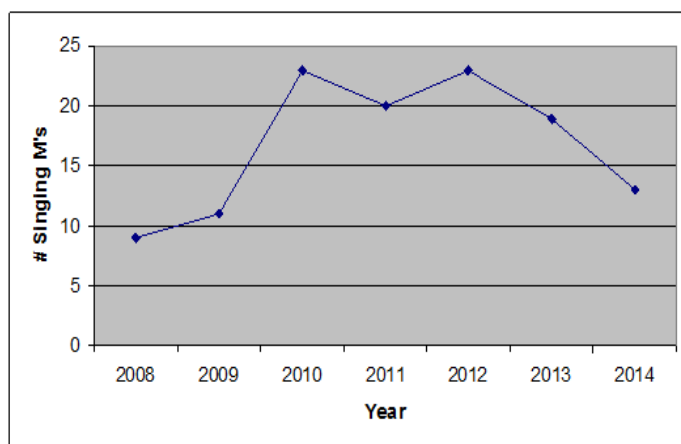
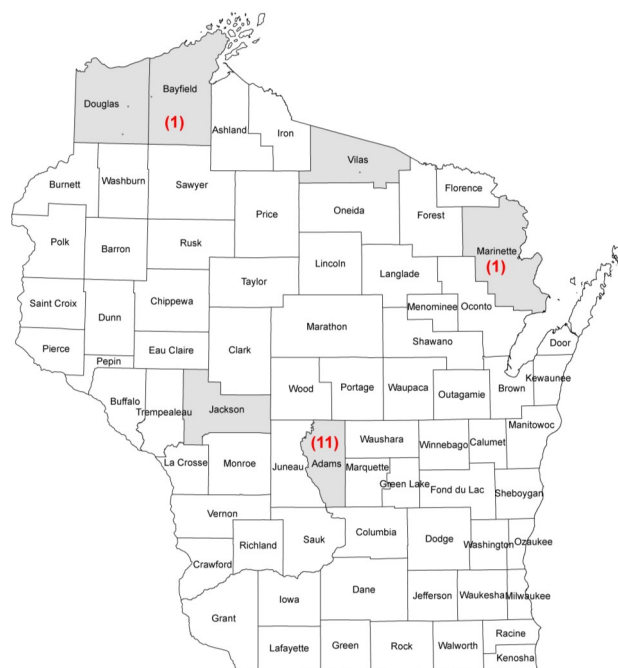


Figure 1. Wisconsin counties with sites surveyed in 2014. Number represents singing males confirmed during the survey period (June 6-20) in Adams, Bayfield, and Marinette Counties.



Ashley Hannah, 2014 nest monitor, surveys for Kirtland's warblers in Adams County.

Photo courtesy of Ashley Hannah



A color-banded male Kirtland's warbler observed on May 11, 2014, Adams County. *Photo courtesy of Joel Trick*

Kirtland's Warbler Banding Summary

Banding Highlights

- The banding crew was led by Ron Refsnider and included Joel Trick, Sarah Warner, Ashley Hannah, and Jonathan Stein
- 6 adult males were captured and 5 banded during the 2014 season:
 - 1 was a recapture on May 30 in Adams County, previously banded at the site in 2013
 - 2 were banded on May 30 in Adams County
 - 3 were banded on June 10: 2 in Adams County, 1 in Bayfield County
- 3 adult females were captured and 2 were banded on May 30 in Adams County
 - 1 was a recapture, previously banded at the site in 2013
 - 2 were unbanded and subsequently banded
- 6 nestlings from 2 nests were banded this year: 2 on June 24, 4 on July 5
 - All 6 fledged successfully
- See Trick et al. (2014) Banding Report for more details



Male Kirtland's warbler with color-bands, Adams County, WI.

Photo courtesy of Joel Trick



An adult male Kirtland's singing atop a Red Pine in Adams County, WI. This male is easily identified by its color-band combination. *Photo courtesy of Joel Trick*



Ron Refsnider carefully applies color-bands to an adult male Kirtland's warbler. Banding pliers were used to make sure the color-band was tightly closed.

Photo courtesy of Joel Trick

Kirtland's Warbler Playback Experiment

Study Highlights

- Playbacks were established in Bayfield County Forest, Chequamegon-Nicolet National Forest, Vilas County Forest, and Marinette County Forest
- 1 male color-banded Kirtland's warbler was observed at the playback site in Bayfield. This male was banded on June 10
- No Kirtland's were detected at the other three sites
- See Anich and Ward (2014) Kirtland's Warbler Conspecific Playback Experiment Report for more details

Adams County Cowbird Trapping

Trapping Summary

- 4 traps were placed at the Adams County breeding site
- 110 cowbirds were captured (100 males, 10 females) producing the lowest numbers since trapping was initiated in 2008
 - For comparison, a total of 207 cowbirds were caught in 2013, 216 caught in 2012, 166 caught in 2011, 216 caught in 2010, and in 2009 a total of 303 cowbirds were caught
- Traps were placed and managed by Barry Benson, USDA APHIS-Wildlife Services



USDA Wildlife Services establishes cowbird traps at the Adams County breeding site.

Photo courtesy of Barry Benson



Live cowbirds are used as bait to attract free-flying cowbirds at the Adams County breeding site.

Photo courtesy of Barry Benson

Kirtland's Warbler Field Trips

Trip Summary

- 3 field trips to the Adams County site were offered in 2014
 - 1 on May 23 and 1 on May 24 through the Natural Resources Foundation of Wisconsin
 - 1 on June 10 for the Chicago Field Museum board members and staff
- The field trips were attended by a combined total of approximately 56 people
- The field trips raised funds that will be used for Kirtland's warbler conservation in Wisconsin



Sarah Warner, USFWS, holds a newly banded male Kirtland's warbler in Adams County, WI.

Photo courtesy of Ashley Hannah

Acknowledgements

The information presented in this report is the work of the Wisconsin Department of Natural Resources (Kim Grveles, Nick Anich, Davin Lopez, Richard Staffen, Amy Staffen), nest monitors (Ashley Hannah, Jonathan Stein), U.S. Fish and Wildlife Service (Sarah Warner, Joel Trick and Ron Refsnider - USFWS retired biologists), U.S. Department of Agriculture - Wildlife Services (Barry Benson), Plum Creek Timber Company and Timberland Investment Resources, and the work of many dedicated partners and volunteers.

Plum Creek Timber Company and Timberland Investment Resources allowed us to use their lands to conduct monitoring, banding and cowbird trapping, and provided great support and information at our Natural Resources Foundation of Wisconsin (NRF) Kirtland's Warbler Field Trips. The U.S. Department of Agriculture (USDA)-Wildlife Services contributed resources to fund operation of cowbird traps, with the efforts of Wildlife Specialist Barry Benson proving essential to the nesting success of Wisconsin Kirtland's warblers. We also thank USDA Wildlife Services for support during the NRF Field Trips.

The NRF provided funding to support Adams County monitoring, cowbird trapping, and banding efforts. NRF also funded Kim Grveles involvement which included project coordination and management, public outreach, field trip organization, and education. A Citizen-Based Monitoring Grant from the Wisconsin Department of Natural Resources (DNR) Natural Heritage Conservation Program funded the statewide surveys. We are grateful to the U.S. Army Construction Engineering Research Laboratory, Bayfield County Forest, and the NRF for funding the Kirtland's Warbler Conspecific Playback Experiment.

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This year we again had the services of two capable field biologists as Kirtland's warbler monitors, Ashley Hannah and Jonathan Stein. We wish them both the best of luck in future endeavors. Adams County tree farmer Nancy Livingston provided lodging for one of our nest monitors, as she has for the past four years. Peggy and Roy Werner also provided housing for one of our nest monitors. Housing is a critical need for the project each year, and we are deeply grateful to Nancy and the Werners for their incredible hospitality.

Ron Refsnider and Joel Trick contributed their time and invaluable expertise to make our color banding efforts a great success and the NRF covered costs associated with their travel. Special thanks to Daryl Christiansen for help in training the nest monitors and providing expertise on Kirtland's warbler ecology. A number of County Forest Administrators provided assistance in identifying potential suitable habitat to survey for Kirtland's warblers. The generous efforts of numerous enthusiastic volunteer birders allowed us to survey for Kirtland's warblers at many Wisconsin sites. We wish to thank volunteers Jack Swelstad, Paul and Glenna Schwalbe, Pat Hagan, Dave Wiemiller, Jim and Cynthia Krakowski, Tom Collins, Kurt Brownell, and Dan Jackson for their survey assistance. Wisconsin DNR biologist Steve LaValley helped with the surveys and Jon Robaidek helped with the field trip tours and we are grateful for their assistance.

Our work with Kirtland's warblers in Wisconsin generates a great deal of interest, and our success is a tribute to the many individuals and organizations involved in the project. As has been the case throughout the life of the project, we continue to be dependent upon the critical contributions of our numerous partners. A sincere thank you to you all!

Sarah Warner
U.S. Fish & Wildlife Service
608-283-9333
Sarah_Warner@fws.gov

Kim Grveles
Wisconsin Department of Natural Resources
608-266-0822
kim.grveles@wisconsin.gov